

PATENT SPECIFICATION



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225,971

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PROVISIONAL SPECIFICATION.

Improvements in or relating to a Handle for Doors, Windows, and the like.

We, DIE CASTINGS, LIMITED, a British company, and CECIL JOSEPH LANGSTONE, a British subject, both of 176, Moseley Street, Birmingham, do hereby declare the nature of this invention to be as follows:—

This invention is for improvements in or relating to a handle for doors, windows, and the like, and more particularly to an aluminium handle which will be simple in its construction, efficient in its operation, and inexpensive in its manufacture.

According to the present invention, there is provided a handle which both combines strength and utility with a marked decrease in the cost of production, wherein a handle comprises two right-angle aluminium die-cast members, one arm of which is securable to a door, window, or the like, in such a manner that it extends substantially in a normal direction therefrom, and a tubular element arranged to receive the free ends of the second arms, so as to extend between the said members and be locked thereto.

One method of carrying the invention into effect comprises casting two members which are in the form of right-angle arms. One arm of each member is provided at its free end with a plate, so arranged that it may be secured to a door, window, or the like, so as to enable the arm secured thereto to extend from the surface of the door, window, or the like, in substantially a normal direction. The arms which extend at right angles to the arms secured to the said plates are constructed so as to be inserted into the ends of an aluminium tube, so as to extend for approximately a distance of one inch into the interior thereof. The arms are then secured to the said tubular element in any desired manner, preferably by means of aluminium pegs.

Thus it will be seen that by constructing a handle in the manner hereinbefore set forth, there is provided a handle very simple in its construction, efficient in its operation, and considerably less expensive than handles of a like character at present in use. The portions of the right-angle members which extend into the tubular element provide sufficient bearing surface between the tubular element and the right-angle members, and it is found that a handle constructed in this manner is as rigid, and as capable of resisting distortion or breakage, as is the case wherein the whole of the handle is cast in one piece, but by the construction hereinbefore referred to it will be appreciated that considerably less material is necessary in the process of manufacture, and, therefore, the handle may be constructed at less cost, and, incidentally, the structure of the whole is lighter than when the handle is cast in one piece.

Dated this 2nd day of October, 1923.

LEWIS W. GOOLD, C.I.Mech.E.,
Fellow of the Chartered Institute of
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5, Corporation Street, Birmingham.

COMPLETE SPECIFICATION.

Improvements in or relating to a Handle for Doors, Windows, and the like.

We, DIE CASTINGS, LIMITED, a British company, and CECIL JOSEPH LANGSTONE, a British subject, both of 176, Moseley Street, Birmingham, do hereby declare the nature of this invention and in what manner the same is to be performed, to

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be particularly described and ascertained in and by the following statement:—

This invention is for improvements in or relating to a handle for doors, windows, and the like, and more particularly to an aluminium handle which will be simple in its construction, efficient in its operation, and inexpensive in its manufacture.

The present invention consists of a handle for a door, window, or the like, which comprises, in combination, two right-angle members cast from aluminium, and adapted to be secured to a door or the like, in such a manner that one limb of each member is directed towards the other member and lies co-axial with the corresponding limb of the other member, and a tubular element adapted to receive the free ends of said limbs to constitute a bridge between the two members.

The invention is more particularly described with reference to the accompanying drawings, in which:—

Figure 1 shows a front elevation of a handle constructed according to the present invention, and

Figure 2 illustrates a sectional side elevation of the handle illustrated in Figure 1.

Referring to the drawings, which illustrate one method of carrying the invention into effect, two members 1 and 2 are cast from aluminium in the form of right-angle arms. One arm 1^a and 2^a of each member 1 and 2 respectively is provided at its free end with a plate 1^b and 2^b, so arranged that it may be secured to a door, window, or the like, so as to enable the arms 1^a and 2^a to extend from the surface of the door, window, or the like, in substantially a normal direction. The arms 1^a and 2^a which extend at right angles to the arms 1^b and 2^b secured to the said plates 1^b and 2^b are provided at their free ends with reduced portions 1^d and 2^d adapted to be inserted into the ends of an aluminium tube 3, so as to extend for approximately a distance of one inch into the interior thereof. The arms are then secured to the said tubular element in any desired manner, preferably by means of pegs or lugs 1^e and 2^e formed on the portions 1^d and 2^d engaging with slots formed in the tube 3. The ends of the tube 3 are adapted to engage with shoulders 1^f and 2^f formed on the arms 1^b and 2^b when the handle is assembled, thus presenting a unit of a rigid and strong nature.

Thus it will be seen that by construct-

ing a handle in the manner hereinbefore set forth, there is provided a handle very simple in its construction, efficient in its operation, and considerably less expensive than handles of a like character at present in use. The portions 1^d and 2^d of the right-angle members 1 and 2 which extend into the tubular element 3 provide sufficient bearing surface between the tubular element 3 and the right-angle members 1^d and 2^d, and it is found that a handle constructed in this manner is as rigid, and as capable of resisting distortion or breakage, as is the case wherein the whole of the handle is cast in one piece, but by the construction hereinbefore referred to it will be appreciated that considerably less material is necessary in the process of manufacture, and, therefore, the handle may be constructed at less cost, and, incidentally, the structure of the whole is lighter than when the handle is cast in one piece.

Having now particularly described and ascertained the nature of our said invention and in what manner the same is to be performed, we declare that what we claim is:—

1. A handle for a door, window, or the like, which comprises, in combination, two right-angle members cast from aluminium, and adapted to be secured to a door or the like, in such a manner that one limb of each member is directed towards the other member and lies co-axial with the corresponding limb of the other member, and a tubular element adapted to receive the free ends of said limbs to constitute a bridge between the two members.

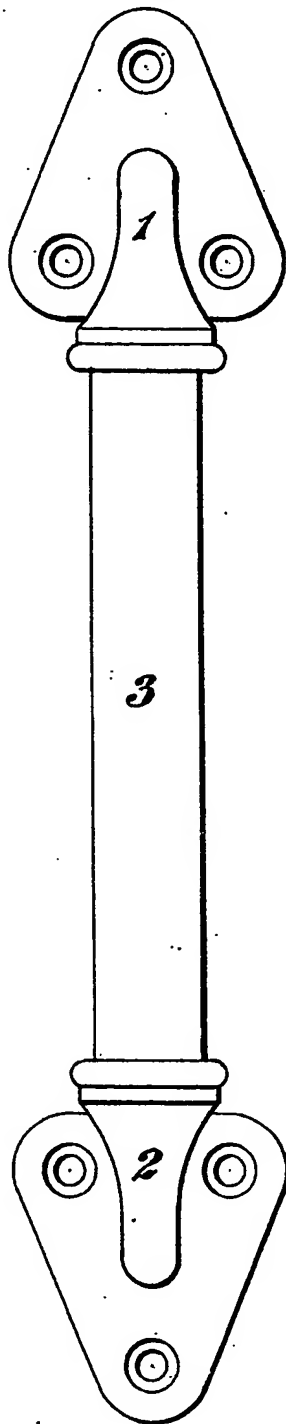
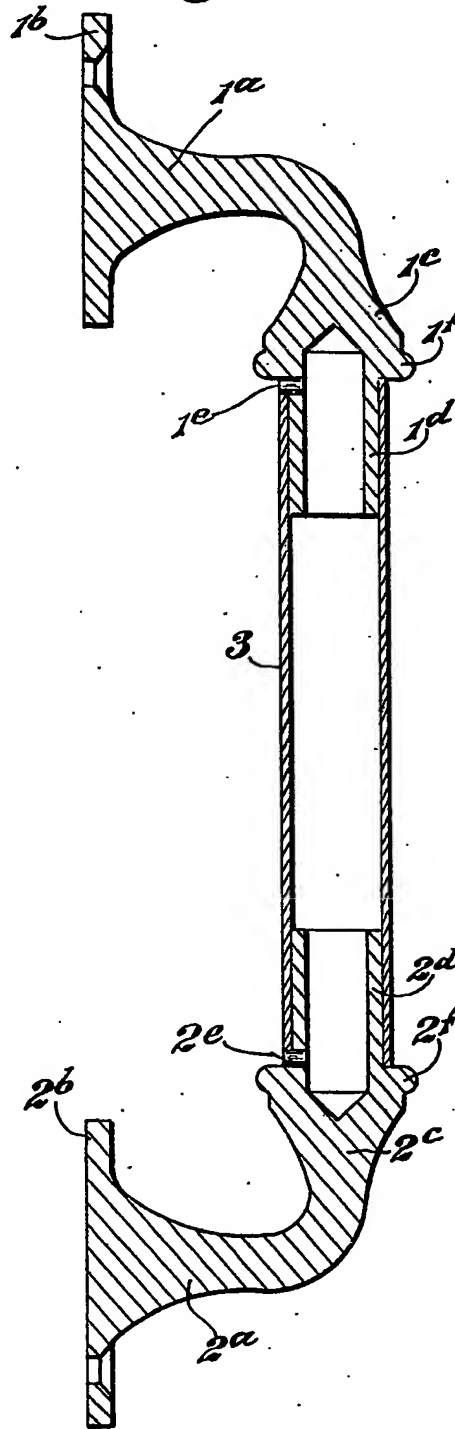
2. A handle for a door, window, or the like, as claimed in Claim 1, in which the tubular member is adapted to be secured to the free ends of the said limbs, in such a manner as to prevent relative rotation between the same.

3. A handle for a door, window, or the like, as claimed in Claim 2, in which slots formed in the ends of the tubular member are adapted to engage with lugs or the like formed on or secured to the free ends of said limbs.

4. A handle for a door, window, or the like, substantially as described and illustrated.

Dated this 6th day of May, 1924.

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Fig. 1.*Fig. 2.*

[This Drawing is a reproduction of the Original on a reduced scale]

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